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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,027	11/03/2003	Perry Coman	USP1978A-PC	2121

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EXAMINER

SAWHNEY, HARGOBIND S

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,027

Applicant(s)

COMAN, PERRY

Examiner

Hargobind S. Sawhney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 17-20, 22 and 26 is/are rejected.
- 7) ☒ Claim(s) 11-16, 21, 23-25, 27 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 21, 23, 25, 27 and 28 are objected to because of the following informalities:

Claim 21, line 2, " ribs radially and extended to define" should be rephrased as -- ribs extended radially to define -- for clear recitation.

Appropriate correction is required.

Claims 23, 25, 27 and 28 are necessarily objected because of their dependency on the objected base Claim 21.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (US Patent No.: 6,533,446 B2).

Regarding claims 1-7 and 20, Chen et al. ('446 B2) discloses a radial projection light source 100 (Figures 1 and 2) comprising:

- a shelter housing 12 including a protection base – upper circular plate with a central aperture (Figure 2) – having a light source cavity – a hollow portion defined by the protection base plate and cylindrical wall of the shelter housing 12 (Figure 2)-, and a supporting frame 8 – combination of elements 3-9 – mounted on the protection base (Figure 2, column 2, lines 54-61);
- an illumination unit – combination of elements 10, 11 – including a power source 11 supported in the protection base; and a light source 10 positioned in the light source cavity (Figure 2, column 2, lines 54-61);
- the light source 10 electrically connected to the power source 11 (Figure 2, column 3, lines 4-6);
- a reflecting member 2 positioned coaxially above the light source 10 (Figure 2, column 4, lines 60, 61; and column 5, lines 4 and 5);
- the reflecting member 2 including a light reflecting surface radially projected from the light source 10, and the reflecting member 10 radially reflecting light from the light source 10 to outside (Figure 2, column 4, lines 60, 61; and column 5, lines 4, 5 and 15-18);
- the light-reflecting member 2 extended inclinedly and upwardly with respect to the light source 10 (Figure 2, column 5, line 15-18);

- the reflecting member 2 having a cone-shaped reflecting surface supported above the light source 10 in an inverted manner (Figure 2); and the reflecting surface being formed at an outer circumferential surface (Figure 2, column 5, lines 15-18);
 - the base circumferential edge 22 of the reflecting member 2 being securely held by the supporting frame 8 – specifically by the portion 3 of the supporting frame 8 – while allowing an apex of the reflecting member 2 pointing towards the light source 10 (Figures 2 and 5); and
 - the light source 10 including an electrical circuit electrically connected to the power source 11 (Figure 2, column 2, lines 66 and 67; and column 3, lines 1-9); and the light source 10 aligned with the reflecting member 2 (Figure 2).
-

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US Patent No.: 6,533,446 B2) in view of Nakano (US Patent No.: 6,600,585 B1).

Regarding 8, Chen et al. ('446 B2) discloses a radial projection light source 100 (Figures 1 and 2) comprising a light emitting diode (LED) as the light source. However, Chen et al. ('446 B2) does not specifically teach the luminary element of the LED having two terminal electrodes electrically connected to an electric circuit, and the luminary element emitting light when electrified. Note: The electrical coupling of the terminal electrodes to the electrical circuit is operational requirement for the luminary element of the LED to emit light.

On the other hand, Nakano ('585 B1) discloses an optical transmitter 81 (Figure 8) including an LED 32 having two terminal electrodes electrically coupled to an electrical circuit 33 to be electrified for emitting light (Figure 8, column 7, lines 1-4 and Claim 1).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to realize the need of electrically coupling the terminal electrodes of the LED for their operation, and electrically connect the LED light source as taught by Nakano ('585 B1) for the benefits of energizing the light source for it to emit light.

Claims 9 and 10, dependent on claims 6 and 7 respectively, Chen et al. ('446 B2) in view of Nakano ('585 B1) discloses the radial light projection light source meeting the limitations in similar manner as that detailed above for the rejection of Claim 8.

Claim 26, dependent on claim 20, Chen et al. ('446 B2) in view of Nakano ('585 B1) discloses the radial light projection light source meeting the limitations in similar manner as that detailed above for the rejection of Claim 8.

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6. Claims 17-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US Patent No.: 6,533,446 B2) in view of Hutchisson et al.(US Patent No.: 5,608,290).

Regarding 17, Chen et al. ('446 B2) discloses a radial projection light source comprising an LED light source energized with a power source positioned at the bottom portion of the protection base. However, Chen et al. ('446 B2) does not specifically teach the power source being a replaceable battery.

On the other hand, Hutchisson et al. ('290) discloses an LED flashing lantern 11 (Figures 1 and 3) comprising a plurality of LEDs 15 powered with a DC power source 31 - considered as a battery - (Figures 1 and 3, column 4, lines 3, 52, 53 and 57).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the radial projection light source of Chen et al. ('446 B2) by providing the battery for powering the LEDs as taught by Hutchisson et al. ('290) for the benefits of energizing the light source with substantial constant voltage for constant light intensity level.

Claims 18 and 19, dependent on claims 6 and 7 respectively, Chen et al. ('446 B2) in view of Hutchisson et al. ('290) discloses the radial light projection light source meeting the limitations of each of the claims in similar manner as that detailed above for the rejection of Claim 17.

Regarding Claim 22, dependent on Claim 20, Chen et al. ('446 B2) discloses a radial projection light source comprising a light source 10 positioned in the compartment - a hollow portion defined by the upper plate and cylindrical wall of the shelter housing

12 (Figure 2) – housing the light source and the power source. However, Chen et al. ('446 B2) does not teach the light source being lifted up above the compartment.

On the other hand, Hutchisson et al. ('290) discloses an LED flashing lantern 11 (Figures 1 and 3) comprising a plurality of LEDs 15 powered with a DC power source 31 - considered as a battery – (Figures 1 and 3, column 4, lines 3, 52, 53 and 57). In addition, Hutchisson et al. ('290) teaches the light source being lifted up above the compartment 13 housing the batteries (Figures 1 and 3, column 4, lines 2-4).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the radial projection light source of Chen et al. ('446 B2) by the LEDs above the battery compartment as taught by Hutchisson et al. ('290) for the benefits of providing maximum exposure of the luminary elements of the LEDs to the light reflecting elements for high light reflection efficiency.

In addition, Regarding 22, Chen et al. ('446 B2) discloses a radial projection light source comprising an LED light source energized with a power source positioned at the bottom portion of the protection base. However, Chen et al. ('446 B2) does not specifically teach the power source being a replaceable battery.

On the other hand, Hutchisson et al. ('290) discloses an LED flashing lantern 11 (Figures 1 and 3) comprising a plurality of LEDs 15 powered with a DC power source 31 - considered as a battery – (Figures 1 and 3, column 4, lines 3, 52, 53 and 57).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the radial projection light source of Chen et al. ('446 B2) by providing the battery for powering the LEDs as taught by Hutchisson et al. ('290) for the benefits

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of energizing the light source with substantial constant voltage for constant light intensity level.

Allowable Subject Matter

7. Claims 11-16, 21, 23-25, 27 and 28 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record, including Chen et al. ('446 B2) and does not show or suggest the applicant's invention as claimed. Specifically, the prior art of record does not disclose a radial projection light source combining:

- a frame supporting having a plurality of ribs radially extending from the light source cavity; and the radial ribs supporting reflecting element as recited in each of the claims 11-13;
- a supporting frame including a plurality of radially extending rib made from a transparent material as recited in Claim 21; and
- a switch control positioned at the bottom side of the protection base, and the switch control further having an actuation arm extending to an actuation unit supported underneath an electrical circuit as recited in Claim 24.

The above-indicated combination, including radial ribs extending from the light source cavity, and the radially extending ribs supporting the reflecting element, makes this invention unique.

Claim 14 is necessarily objected because of their dependency on the objected base Claim 11.

Claim 15 is necessarily objected because of their dependency on the objected base Claim 12.

Claim 16 is necessarily objected because of their dependency on the objected base Claim 13.

Claims 23, 25, 27 and 28 are necessarily objected because of their dependency on the objected base Claim 21.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Suckow et al. (U.S. Patent No. 6,679,618 B1), Coughaine (U.S. Patent No. 6,637,921 B2), Watterson et al. (U.S. Patent No. 6,623,140 B2), Rohlfing et al. (U.S. Patent No. 6,554,441 B2), Rizin et al. (U.S. Patent No. 6,543,911 B1), Petrick (U.S. Patent No. 6,464,373 B1), Chen et al. (U.S. Patent Application Pub. No. US 2002/0114170 A1), Gallo (U.S. Patent No. 6,364,506 B1), Strong, III et al. (U.S. Patent No. 5,559,510), Ruud et al. (U.S. Patent No. 5,105,347), Madsen (U.S. Patent No.

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3,634,675), Scarpino et al. (U.S. Patent No. 3,875,561), Bonner, Jr. (U.S. Patent No. 3,264,463 and Andrews (U.S. Patent No. 1,877,785)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:45.

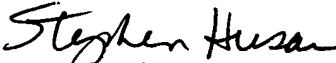
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS
5/13/2005


Stephen Husar
Primary Examiner